ARM 36.22,307, 601, 605, 1003, 1004, 1011, 1013, 1103, 1222, 1240, 1301, 1306, 1309, and 1417

Submit In Quadruplicate To:

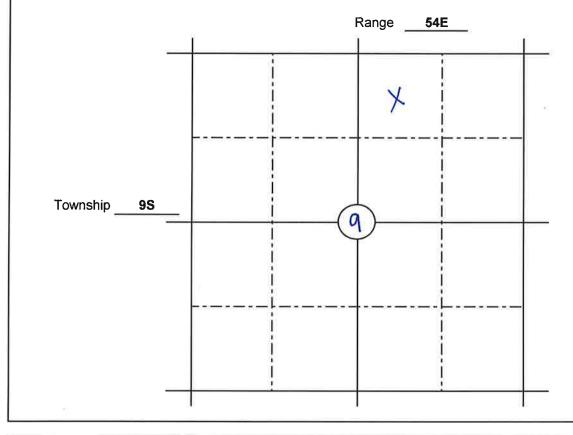
MONTANA BOARD OF OIL AND GAS CONSERVATION 2535 ST. JOHNS AVENUE BILLINGS, MONTANA 59102

| S | SUNDRY NOTICES A | ND REPO | ORT OF WELLS | | | | | | |
|---|--|--|--|--|--|--|--|--|--|
| Operator Denbury Onshore, L | LC * | | Lease Name: Unit | | | | | | |
| Address 5320 Legacy Drive City Plano State | TX Zip Code 7502 4 | | Type (Private/State/Federal/Tribal/Allotted): Fee | | | | | | |
| Oity I laito State | 1A 21p Code 73024 | • | Well Number: | | | | | | |
| Telephone 972-673-2000 | | | 9-2 MAR - 8 2018 | | | | | | |
| Location of well (1/4-1/4 section an NW - NE Sec. 9, T9S - R54E | d footage measurements); 660' FNL & 1980' FEL | | Unit Agreement Name: BCCMU MONTANA BOARD OF OIL GAS CONSERVATION & BULL | | | | | | |
| | | | Field Name or Wildcat: | | | | | | |
| | | | Bell Creek | | | | | | |
| | | | Township, Range, and Section: | | | | | | |
| API Number: | Well Type (oil, gas, injecti | on, other): | T9S - R54E, Sec. 9 | | | | | | |
| 25 075 21720 · State County Well | Oil | | County: Powder River, MT | | | | | | |
| Indicate below with an X the nature | of this notice, report, or other | r data: | | | | | | | |
| Notice of Intention to Change Plans | | | ent Report of Mechanical Integrity Test | | | | | | |
| Notice of Intention to Run Mechanic Notice of Intention to Stimulate or to | | | Subsequent Report of Stimulation or Treatment Subsequent Report of Perforation or Cementing | | | | | | |
| Notice of Intention to Perforate or to | | Subsequent Report of Well Abandonment | | | | | | | |
| Notice of Intention to Abandon Well | | | ent Report of Pulled or Altered Casing | | | | | | |
| Notice of Intention to Pull or Alter C | - | Subsequent Report of Drilling Waste Disposal | | | | | | | |
| Notice of Intention to Change Well | Status 🔲 | Subseque | ent Report of Production Waste Disposal | | | | | | |
| Supplemental Well History | | Subsequent Report of Change in Well Status | | | | | | | |
| Other (specify) Fracture Stimulat | e X | Subsequent Report of Gas Analysis (ARM 36.22.1222) | | | | | | | |
| | | \$ | | | | | | | |
| necessary. Indicate the intended startin Denbury requests approval to fra | ng date for proposed operations on the cture stimulate the subject truent report has been incl | onfiguration dia or the completion or well. Please | agrams, analyses, or other information as | | | | | | |
| BOARD USE Approved MAR 0 9 2018 Date | ONLY | this applica 03/06/ | ate Signed (Agent) | | | | | | |
| 3.0 | Di | Naomi | i Johnson - Regulatory Compliance Specialist | | | | | | |
| gripo - | retoleny Engineer | | Print Name and Title | | | | | | |
| Mame | Title | Telephone | 972-673-2000 | | | | | | |

SUPPLEMENTAL INFORMATION

NOTE: Additional information or attachments may be required by Rule or by special request.

Plot the location of the well or site that is the subject of this notice or report.



BOARD USE ONLY

CONDITIONS OF APPROVAL

The operator must comply with the following condition(s) of approval:

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MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

Failure to comply with the conditions of approval may void this permit.



PROCEDURE To Stimulate Well

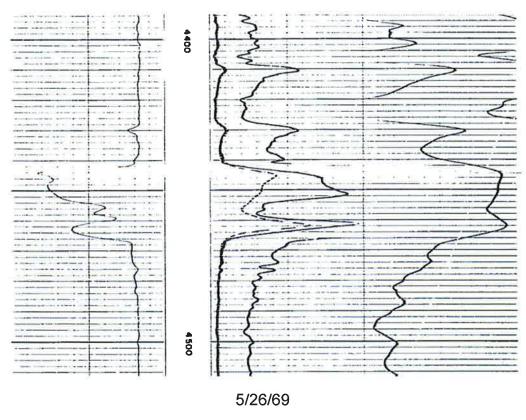
Bell Creek Unit 09-02

Sec 9 – T9S - R54E API # 25075217200000

Powder River County, MONTANA This is a FEE well

OBJECTIVE OF OPERATION:

Pull Capstring - Test production tubing to treating pressure – Perform small hydraulic fracture stimulation on the Muddy– Flow back well - Release to Production



Notes on well

- 1. Last tagged 2015 before Capstring run with 59' rat. Fish is 3' capacitance tool and 2' bhp tool. Well into the rat hole.
- 2. Liner was run on well due to casing issues. Muddy was squeezed with 75sx. Broke through 3; below bottom perf. (Muddy did not have major issues prior to liner). CBL on liner looks good.
- 3. Tagged up 4510 prior to liner (below perfs) and circulated down to 4545'.
- Completed 1969 Squeezed and re-perf'd interval due to water influx from top zone (currently open).



- 5. NOTE: Check local Well File before beginning job.
- 6. Pre-Job: Confirm Sundry approval. Secure Wellhead, Flowline, and Electrical. Notify BLM/State as required.
- 7. MIRU Capstring Pulling Unit. POOH w/ 38" internal Capstring. RDMO Capstring Pulling Unit.
 - a. Spool Capstring and place in yard for further inspection.
- 8. MIRU SL. RIH with 1-1/4" bailer and tag bottom. Record depth. TOOH. RDMO SL.
 - a. Notify Plano if tag high for path forward. Jar for sample if high.
- 9. MIRU Hot-oiler. PT Production Casing as directed below. RDMO Hot-oiler.
 - a. Test to a maximum anticipated PCP of 1500psi for 15 min. Chart it no more than 10% pressure loss.
 - i. If casing fails contact Plano for procedure moving forward.
- 10. MIRU SL. PU PX plug. RIH & set in XN nipple below the packer. TOOH. RDMO SL.
- 11. Bleed off pressure and ensure tubing & casing are dead.
- 12. Install BPV. ND WH. NU BOP. Test as per Denbury Standards. Remove BPV.
- 13. Install 2-3/8" to 2-7/8" Xover, 6ft 2-7/8" L-80 pup, 2-7/8 to 3" 1502 Xover, & 3" 1502 Plug Valve.
- 14. Close Pipe Rams. MIRU Clean Hot-oiler. PT tubing as directed below. RDMO Hot-oiler.
 - a. Test tubing to maximum anticipated treating pressure @5000# for 15 minutes. Chart it no more than 10% pressure loss. Hold 1000# on the backside (As anticipated for job).
 - i. If tubing fails contact Plano for procedure moving forward.
 - b. Bleed off casing to 0psi and tubing to SI pressure when prong was set.
- 15. MIRU SL. RIH and retrieve prong & PX plug.
- 16. PU BHP gauges. RIH and take BHP mid-perf. POOH. RDMO SL.
- 17. MIRU 400bbl upright tank. Ensure clean use hot-oiler if necessary.
 - a. Fill tank with 400bbls of BIDDLE water.
- 18. MI Flowback Tank and 1502 iron for Flowback/ Frac Operation Relief if necessary.
- 19. MIRU Hot-oiler. Roll tank to 80-100degF (depending on the Weather). RDMO Hot-oiler.
- 20. MIRU Frac Company & Equipment. (Estimated 4-8 hr job -22 minutes to pump time).
 - a. Frac Company responsible for 22,000# 20/40 sand, frac fluid additives, and all frac equipment.

| Frac Additives | | | | | |
|---|---------|---------------------|-------------------|---------------|--|
| | LOADING | NG PER/1000 GALLONS | | | |
| Materials | U O M | Fluid 1 1 910 | Fluid 2 10.250 | <u>Totals</u> | |
| WG-1SLR, Slurried Guar Gel | gal | 5 | 5 | 61 | |
| NE-1, Non Emulsifier (Nonionic) | gal | 2 | 2 | 25 | |
| BIO-2L, Liquid Biocide (THPS) | gal | 0 | 0.2 | 3 | |
| Buffer-4L, High pH (sodium hydroxide) | gal | 0 | 0.1 | 2 | |
| XLB-1, Self Buffered Borate Crosslinker | gal | 0 | 1.5 | 16 | |
| B-4LE, High pH/Low Temp. <140°F Enzyme Break | gal | 0 | 0.3 | 4 | |
| B-1, Oxidizer Breaker (AP) | gal | 1 | 1 | 13 | |
| KCL-2Sub, KCl Substitute (anionic product toleran | gal | 2 | 2 | 25 | |

- b. 2 pressure relief valves will be installed on treating lines between pumps and wellhead to limit the line pressure to max anticipated treating pressure.
- c. Pressure the Production Casing to 800-1000psi prior to job. Hold & monitor with gauge. Set pop-off at 1400psi (100psi less than PT).
- 21. Close 3" Plug Valve. Install 3" Hydraulic valve &test to treating pressure prior to frac.

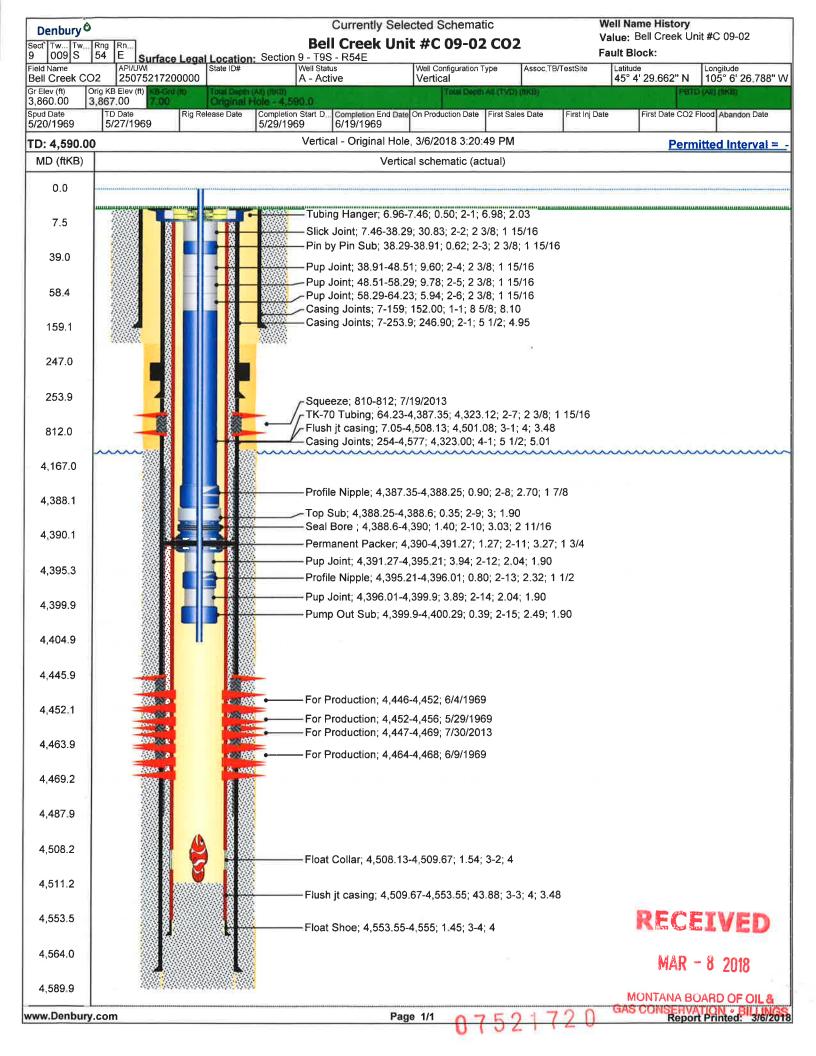


- a. Hydraulic valve will be hooked up during frac to accumulator and serve as the remote controlled shut-in device AT THE WELL HEAD.
- 22. Perform breaker test with Biddle water from tank/X-linker & Breaker prior to job.
 - a. Record, time/strength Xlinked, any visible residuals, and ensure fluid breaks prior to pumping.
- 23. Establish 8-10bpm injection rate with 20# gel for 30 bbls. Record ISIP.
 - a. Note friction pressure of 20# gel.
- 24. Pump the program recommended and attached. Hook up Frac equipment to pull off of 400bbl upright. Hook up diverter line to the flowback equipment.
 - a. Note additional friction pressure from X-linker.
 - **b.** Subject to additional pumping depending on pressures.
 - c. Prior to Flush Drop tub level and bypass tub @4ppg CONCENTRATION
 - **d.** Call flush based on densometer. 3.5 or greater if decide higher concentration.
 - i. Talk to Frac company about bypassing or dropping tub level prior to flush.
 - e. End flush 1bbl prior to perforations. Do NOT over flush. (BH concentration 4ppg).

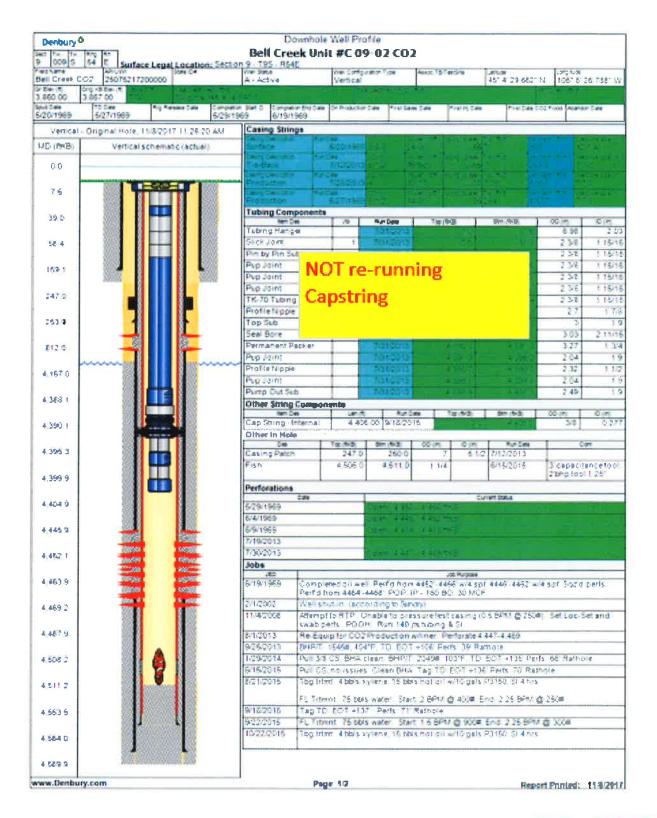
| | Frac Schedule | | | | | | | | |
|-----|---------------|-------|---------------|-------------------|-----------|-------|-------|--------|-------|
| STG | Proppant | Stage | Fluid Type or | Proppant Type or | Stage/lbs | Clean | Clean | Slurry | Stage |
| No. | Lbs./Gal. | Gals. | Comment | Stage Description | Proppant | Rate | Bbls. | Bbls. | Time. |
| 1 | 0 | 1260 | 20# Linear | Pre-Pad | | 10 | 30 | 10 | 3 |
| 2 | 0 | 3000 | 20# X-Link | Pad | - | 10 | 71 | 71 | 7.1 |
| 3 | 1 | 1500 | 20# X-Link | SLF 20/40 White | 1,500 | 9.6 | 36 | 37 | 3.7 |
| 4 | 2 | 1500 | 20# X-Link | SLF 20/40 White | 3,000 | 9.2 | 36 | 39 | 3.9 |
| 5 | 3 | 1500 | 20# X-Link | SLF 20/40 White | 4,500 | 8.8 | 36 | 41 | 4.1 |
| 6 | 4 | 1500 | 20# X-Link | SLF 20/40 White | 11,000 | 8.5 | 65 | 77 | 4.2 |
| 7 | 0 | 500 | 20# Linear | Flush | - | 10 | 16.00 | 16.00 | 2.5 |

- 25. Record the ISIP @5, 10, & 15 minutes after pumping.
- 26. RDMO Frac Company & Equipment.
 - a. Send pump chart and other necessary data to the Plano office.
- 27. RU 1502 iron & manifold to Gas Buster. Flowback the well as directed by Plano.
 - a. Start 9ck. Maximum 1bpm. Expect sand bottoms up. Monitor sand returns for following 40 bbls. (fill 5 gal bucket 8 seconds)
 - b. Flowback 110% volume pumped. Do NOT flow back greater than 2BPM.
- 28. MIRU slickline. RIH w/ 1-1/4" bailer and tag TD. Record depth. TOOH.
 - a. Notify Plano if tag high before moving forward. Jar for sample if high.
- 29. PU PX plug. RIH and set in X nipple above packer in SA. TOOH. RD SL. Bleed tubing 0psi.
- 30. Install BPV. RD BOP and associated equipment. NU Wellhead. Test. Remove BPV.
- 31. MIRU Clean Hot-oiler. Pressure up tubing to SI pressure when prong was set. RDMO Hot-oiler.
- 32. RU SL. RIH and retrieve PX plug in SA. TOOH. RDMO SL.
- 33. MIRU CTU if tagged high. Clean out to PBTD. RDMO CTU.
- 34. Release to operations.













Denbury Onshore LLC Bell Creek

Broadus, MT
BCU Vertical Fracs
Sand Frac
Per Well, 2 Wells/day

Prepared for: Mr. Charlie Hagan Denbury Onshore LLC 972-673-2172 charlie.hagan@denbury.com

Prepared by: Rick Boyce
QES PRESSURE PUMPING LLC
(307) 388-4331

February 8, 2018

Service Point: Gillette, WY: (307) 686-4914

Account Manager: Rick Boyce (307) 388-4331

DISCLAIMER NOTICE

This technical data is presented in good faith and QES Pressure Pumping LLC assumes no liability for recommendations or advice made concerning results to be obtained from the use of any products or service. The prices quoted are only estimates and may vary depending on equipment, materials used, hours and the work actually performed. Pricing does not include federal, state & local taxes that may apply. This quotation will remain in effect for 45 days from the date on proposal unless otherwise stated.

Writer Version 3.5!

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JOB DATA

Purpose Of Treatment:

Enhance Production

Job Type:

Sand Frac

Treating Conductor:

Est. Average Pump Rate (bpm):

10

Est. Average. Treating PSI:

| fax. Pressure (psi): Fluid Requirements: | Fluid Description | Volume | U.O.M. |
|--|---------------------------------|--------|--------|
| | 20# Linear | 1,910 | Gallon |
| | 20# Xlink | 10,250 | Gallon |
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| roppant/Divert Requiremen | ts: Proppant/Divert Description | Volume | U.O.M. |
| | 16/30 Northern White Sand | 20,000 | lb |
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| Well/Job Data: | Well/Job Data Description | | |
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Information/Directions/Comments:

QES Pressure Pumping LLC may incorporate the daily use of Knight Fire Suppression Systems (Fire Suppressant System/Certified Firefighter/EMT Personnel) on all fracturing jobs for the safety of "ALL" personnel & equipment on the well site during the pressure pumping operation.



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FLUID DESCRIPTION

Fluid 1: 20# Linear Fluid 2: 20# Xlink

| | | LOADING PER/1000 GALLONS | | | | | | | | | |
|---|--------|--------------------------|-------------------|---------|---------|---------|---------|---------|--------|---------|--------|
| MATERIAL'S | U.O.M. | Fluid 1 1,910 | Fluid 2 10,250 | Fluid 3 | Fluid 4 | Fluid 5 | Fluid 6 | Fluid 7 | Find 8 | Fluid 9 | Totals |
| WG-1SLR, Slurried Guar Gel | gal | 5.00 | 5.00 | | | | | | | | 61 |
| NE-1, Non Emulsifier (Nonionic) | gal | 2.00 | 2.00 | | | | | | | | 25 |
| BIO-2L, Liquid Biocide (THPS) | gal | 0,20 | 0.20 | | | | | | | | 3 |
| Buffer-4L, High pH (sodium hydroxide) | gal | | 0.10 | | | | | | | | 2 |
| XLB-1, Self Buffered Borate Crosslinker | gal | | 1.50 | | | | | | | | 16 |
| B-4LE, High pH/Low Temp. <140°F Enzyme Break | gal | | 0.30 | | | | | | | | 4 |
| B-1, Oxidizer Breaker (AP) | lb | 1.00 | 1.00 | | | | | | | | 13 |
| KCL-2Sub, KCl Substitute (anionic product toleran | gal | 2.00 | 2.00 | | | | | | | | 25 |
| | | | ((| | | | | | | | 0 |
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Fluid and Storage Requirements:





Pump Schedule

| Perforations: |
|---------------|
|---------------|

Maximum Pressure (psi): Est. Treating Pressure (psi):

| none. | | | | Est. Treating Fressure (psi). | | | | | | |
|---------------|-----------|-----------------|-------------|-------------------------------|--|------------|---------------|-------------|---------------|---------------|
| SIG | Proppant | Stage | Fluid Type | Proppant Type or | Stage/lbs. | Clean Rate | Clean | Slurry Rate | Slurry | Stage |
| No. | Lbs./Gal. | Gals. | or Comment | Stage Description | Proppant | (bpm) | Bbls. | (bpm) | Bbls. | Time |
| 1 | | 1,260 | 20# Linear | Pre-Pad | AND DESCRIPTION OF THE PARTY OF | 10.0 | 30 | 10 | 30 | 3,0 |
| | | 3,000 | 20# Efficat | | | | 30 | 10 | | |
| 2 | | 3,000 | 20# X-Link | Pad | | 10.0 | 71 | 10 | 71 | 7.1 |
| 3 | 1 | 1,500 | 20# X-Link | SLF 16/30 White | 1,500 | 9.6 | 36 | 10 | 37 | 3,7 |
| 4 | 2 | 1,500 | 20# X-Link | SLF 16/30 White | 3,000 | 9.2 | 36 | 10 | 39 | 3.9 |
| | | 1,500 | ZU# A-LIIK | SLF 10/30 WHITE | 3,000 | 9.4 | 30 | 10 | 39 | 3.9 |
| - 5 | 3 | 1,500 | 20# X-Link | SLF 16/30 White | 4,500 | 8.8 | 36 | 10 | 41 | 4.1 |
| 6 | 4 | 2,750 | 20# X-Link | SLF 16/30 White | 11,000 | 8.5 | 65 | 10 | 77 | 7.7 |
| | | (50 | | | 11,000 | 10.0 | 95 | 10 | 12 | 7.7 |
| 7 | | 650 | 20# Linear | Flush | | 10.0 | 15 | 10 | 15 | 1.5 |
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| | 100 | No. of the last | | | | | | | | |
| | Totals | 12,160 gls | | | 20,000 lbs | | 290 bbt | | 311 bbl | 0.52 hrs |
| | | | | Pump Schedule Comments: | | | 100 | | | |
| | | | | rump schedule comments: | | | | | | |
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PRESSURE PUMPING LLC

CAS INFORMATION:

| Additive | Max Loading 1900 Gal | Specific Gravity | Additive Quantity | Muss (lbs) |
|---------------------------|----------------------|------------------|-------------------|------------|
| WATER (Customer Supplied) | 1,000,00 | 1.00 | 12.160 | 101,475 |
| WG-ISLR, GUAR SLURRY | 5,00 | 1.04 | 61. | 530 |
| NE-1, NON EMULSIFIER | 0.50 | 0.95 | 25 | 198 |
| BIO-2L, BIOCIDE | 0.20 | 1.00 | 3 | 25 |
| BUFFER -4L | 1,00 | 1.22 | 2 | 20 |
| XLB-I, CROSSLINKER | 1,00 | 1,36 | 16 | 181 |
| B-4LE, ENZYME BREAKER | 2.00 | 1.03 | .4 | 34 |
| B-1. BREAKER | 1.00 | 2.55 | 13 | 13 |
| KCI-2SUB, KCI SUBSTITUTE | 0_50 | 1.08 | 2.5 | 226 |
| NORTHERN WHITE SAND | 4.00 | 2,65 | 20,000 | 20,000 |

Total Slurry Mass (Lbs)

122,704

| Name | Ingredients | Chemical Abstract Service Number (CAS #) | Maximum Ingredient Concentration in Additive (% by mass)** | Total Component Mass in HF Fluid (lbs) | Maximum Ingredient Concentration in HF Fluid (% by mass)** |
|---------------------------|---|--|--|---|--|
| WATER (Customer Supplied) | Water | 7732-18-5 | 100.00% | 101,475 | 82.69918% |
| NORTHERN WHITE SAND | Silica Quartz | 14808-60-7 | 100.00% | 20,000 | 16.29939% |
| INC. ICLD. OLLAD CLUDDAY | Solvent Naptha (pct.) heavy aliphatic | 64742-47-8 | 60.00% | 318 | 0.25937% |
| WG-1SLR, GUAR SLURRY | Guar Gum | 9000-30-0 | 50,00% | 265 | 0.21614% |
| NE-1, NON EMULSIFIER | Methanol | 67-56-1 | 30,00% | 60 | 0.04851% |
| KCI-2SUB, KCI SUBSTITUTE | Choline Chloride | 67-48-1 | 70.00% | 158 | 0.12878% |
| ACI-250B, KCI SUBSTITUTE | Water | 7732-18-5 | 30.00% | 68 | 0.05519% |
| BUFFER -4L | Sodium Hydroxide | 1310-73-2 | 30.00% | 6 | 0.00498% |
| BUFFER 4L | Water | 7732-18-5 | 70.00% | 14 | 0.01162% |
| | Sodium Tetraborate Decahydrate | 1303-96-4 | 30.00% | 54 | 0.04436% |
| XLB-1, CROSSLINKER | Alkyl Alcohol C10-C16 | 67762-41-8 | 30,00% | 54 | 0.04436% |
| | Sodium Hydroxide | 1310-73-2 | 30.00% | 54 | 0.04436% |
| B-1, BREAKER | Ammonium persulfate | 7727-54-0 | 100.00% | 13 | 0.01059% |
| | Water | 7732-18-5 | 90.00% | 31 | 0.02522% |
| B-4LE, ENZYME BREAKER | Sodium Chloride | 7647-14-5 | 15.00% | 5 | 0.00420% |
| | Mannanase Enzymes | 37288-54-3 | 2.00% | 1 | 0.00056% |
| BIO-2L, BIOCIDE | Tetrakis(hydroxymethyl) Phosphonium Sulfate | 55566-30-8 | 20.00% | 5 | 0.00408% |
| DIOTAL BIOCIDE | Water | 7732-18-5 | 80.00% | 20 | 0.01632% |

100.00%





PRODUCT DESCRIPTION

| WG-1SLR, Slurried Guar Gel | |
|---|---|
| WG-1SLR, Slurried Guar Gel is a preslurried form of a high-yield guar gum for preparing fracturing fluids. It provides exception in cold water. | nally fast, "fisheye"-free hydration even |
| WG-ISLR, Slurried Guar Gel can be used wherever conventional guar is used. The slurry is 4 pounds of guar per gallon of slurr fly" mixing with fairly low-volume hydration tank in line to the blender. | ry, The rapid hydration allows "on the |
| 1.019 | |
| | |
| NE-1, Non Emulsifier (Nonionic) | |
| NE-I is a highly effective inexpensive nonionic nonemulsifier for oilfield acid and fracs. | |
| NE-1 typically is used at 1 to 4 gpt. | |
| 0.898 | |
| | |
| BIO-2L, Liquid Biocide (THPS) | |
| BIO-2L, Liquid is a liquid biocide based on Tetrakis (Hydroxymethal) Phosphonium Sulfate) (THPS), for use in oilfield water applicat directed, it is a highly effective and economical in controlling most sulfate -reducing and acid-producing bacteria as well as algae and the works synergistically with chlorine- and bromine- based biocides. | |
| BIO-2L, Liquid is best added to frac or flush water as water is transferred. Loadings as low as 1 gpt have been shown to be effective in as 1 gpt may be required in badly contaminated waters. | relatively clean water. Dosages as high |
| 0.95 | |
| | |
| Buffer-4L, High pH (sodium hydroxide) | |
| Buffer-4L, liquid caustic is used in water base fluid to increase the pH | |
| Buffer-4L, liquid caustic are used as increase pH in cleanup and stimulation fluids when required | |
| 1.53 | |
| | |
| XLB-1, Self Buffered Borate Crosslinker | |
| KLB-1 is a self buffering, highly concentrated borate crosslinker for fracturing fluids. It requires no pH control additive. | |
| Normal loadings for XLB-1 range from .6 to 1.4 gpt when used in 30 to 35 ppt guar based gel. Higher loadings may be needed in cold vagents where incomplete hydration of the guar may be occurring. It can be broken with oxidizing breakers or high pH enzyme breakers | |
| 1.303 | |
| | |
| B-4LE, High pH/Low Temp. <140°F Enzyme Breaker | 8 |
| 3-4L is a liquid enzyme breaker designed specifically for borate crosslinked fluid with pH of up to 10. | |
| | |
| | DECETATE |
| B-4L is typically loaded at .2 to 2 gpt. B-4L has a shelf life of 90 days. | RECEIVED |
| B-4L is typically loaded at $.2$ to 2 gpt. B-4L has a shelf life of 90 days. | RECEIVED MAR - 8 2018 |
| | WG-1SLR, Slurried Guar Gel can be used wherever conventional guar is used. The slurry is 4 pounds of guar per gallon of slurn fly" mixing with fairly low-volume hydration tank in line to the blender. 1.019 Tan/yellowish slurry liquid-Water soluble NE-1, Non Emulsifier (Nonionic) NE-1 is a highly effective inexpensive nonionic nonemulsifier for oilfield acid and fracs. NE-1 typically is used at 1 to 4 gpt. 0.898 Pale yellow liquid-Water soluble BIO-2L, Liquid Biocide (THPS) BIO-2L, Liquid Biocide (THPS) BIO-2L, Liquid si a liquid biocide based on Tetrakis (Hydroxymethal) Phosphonium Sulfate) (THPS), for use in oilfield water applicat directed, it is a highly effective and economical in controlling most sulfate -reducing and acid-producing bacteria as well as algae and and works synergistically with chlorine- and bromine- based biocides. BIO-2L, Liquid is best added to frac or flush water as water is transferred. Loadings as low as 1 gpt have been shown to be effective in as 1 gpt may be required in badly contaminated waters. 0.95 Clear colorless liquid-Water soluble Buffer-4L, liquid caustic is used in water base fluid to increase the pH. Buffer-4L, liquid caustic is used in water base fluid to increase the pH. XLB-1, Self Buffered Borate Crosslinker XLB-1, Self Buffered Borate Crosslinker |

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS



PRODUCT DESCRIPTION

| | B-1, Oxidizer Breaker (AP) |
|----------------------------------|--|
| FC5475 | |
| General Information | B-1, APS is an oxidative breaker for fracturing fluids at low to moderate temperatures. |
| Uses & Applications | B-I, APS is typically used in fracturing treatments at loadings of .2 to 2 ppt of fluid. Fluid temperatures most appropriate for Ammonium persulfate are from around 80° F to 190° F. |
| Density in Sp.Gr. | 1.98 |
| Specs | White granules-Water soluble |
| | KCL-2Sub, KCl Substitute (anionic product tolerant) |
| FC5301 General Information | KCL-2Sub is a slightly cationic highly concentrated liquid potassium chloride substitute for oilfield use. Unlike many other KCl substitutes, KCL Substitute is very low in toxicity and contains no surfactants. KCL-2Sub is a 70% Choline Chloride base clay protection product. KCL-2Sub can be used with an Anionic Friction Reducer with little to no effect on the efficiency of the anionic friction reducer. |
| Uses & Applications | KCL-2Sub can be used in any application where the stabilization of formation clays are required. KCL Substitute typical loadings of 5 to 1 gpt will give the base fluid the equivalent clay stabilization of 2% dry potassium chloride in most formations. |
| Density in Sp.Gr. | 1.13 |
| Specs | Clear liquid-Water soluble |
| | |
| General Information | |
| Uses & | |
| Applications | |
| Density in Sp.Gr. | |
| Specs | |
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| General Information | |
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| Applications Density in Sp.Gr. | |
| Specs | |
| - Peec | |
| General Information | |
| Uses & Applications | |
| Density in Sp.Gr. | RECEIVED |
| Space | |

MONTANA SAGE GROUSE HABITAT CONSERVATION PROGRAM



TEVE BULLOCK, GOVERNOR

1539 ELEVENTII AVENUE

- STATE OF MONTANA -

PHONE: (406) 444-0554 FAX: (406) 444-6721 PO BOX 201601 HELENA, MONTANA 59620-1601

Project No. 2583 Governor's Executive Orders 12-2015 and 21-2015 Denbury BCU 09-02 - Fracture Stimulate API# 25-075-21720

Naomi Johnson 5320 Legacy Drive Plano, TX 75024

November 9, 2017

Dear Ms. Johnson,

The Montana Sage Grouse Habitat Conservation Program received a request for consultation and review of your project or proposed activity on November 8, 2017. Based on the information provided, all or a portion of this project is located within General Habitat for sage grouse.

Executive Orders 12-2015 and 21-2015 set forth Montana's Sage Grouse Conservation Strategy. Montana's goal is to maintain viable sage grouse populations and conserve habitat so that Montana maintains flexibility to manage our own lands, our wildlife, and our economy and a listing under the federal Endangered Species Act is not warranted in the future.

The program has completed its review, including:

Project Description:

Project Type: Gas/Oil Well **Project Disturbance:** 0.432 Acres

Construction Timeframe: November, 2017 to November, 2017, Temporary (< 1 Year) Disturbance Timeframe: November, 2017 to November, 2017, Temporary (< 1 Year)

Project Location:

Legal: Township 9 South, Range 54 East, Section 9

County: Powder River Ownership: Private



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Hosted by the Montana Department of Natural Resources and Conservation
Director's Office: (406) 444-2074

Executive Orders 12-2015 and 21-2015 Consistency:

The project proposes to conduct well work on an existing well in designated General Habitat for sage grouse.

Denbury Inc. will be using a workover rig to perform well work on an existing well with an existing wellsite. There will be no ground disturbance. Well work will only take a few days to complete.

Based on the information you provided, your project is not within two miles of an active sage grouse lek.

Recommendations:

These stipulations are designed to maintain existing levels of suitable sage grouse habitat by managing uses and activities in sage grouse habitat to ensure the maintenance of sage grouse abundance and distribution in Montana. Development should be designed and managed to maintain populations and sage grouse habitats.

Weed management is required within General Habitat for sage grouse. Reclamation of disturbed areas must include control of noxious weeds and invasive plant species, including cheatgrass (Bromus tectorum) and Japanese brome (Bromus japonicas).

Your activities are consistent with the Montana Sage Grouse Conservation Strategy. Your proposed project or activity may need to obtain additional permits or authorization from other Montana state agencies or possibly federal agencies. They are very likely to request a copy of this consultation letter, so please retain it for your records.

Please be aware that if the location or boundaries of your proposed project or activity change in the future, or if new activities are proposed within one of the designated sage grouse habitat areas, please visit https://sagegrouse.mt.gov/projects/ and submit the new information.

Thanks for your interest in sage grouse and your commitment to taking the steps necessary to ensure Montana's Sage Grouse Conservation Strategy is successful.

Sincerely,

Carolyn Sime

Montana Sage Grouse Habitat Conservation Program Manager







Director's Office: (406) 444-2074

cc: Jim Halverson Administrator Montana Board of Oil and Gas 2635 St. Johns Ave. Billings, MT 59102





MONTANA BOARD OF OIL AND GAS ATTACHMENT TO FORM 2 "CONDITIONS OF APPROVAL"

A. Field Inspector must be notified at least **24 hours** in advance of the start of fracture stimulation operation.

B. <u>36.22.1106</u> SAFETY AND WELL CONTROL REQUIREMENTS – HYDRAULIC FRACTURING

- (1) New and existing wells which will be stimulated by hydraulic fracturing must demonstrate suitable and safe mechanical configuration for the stimulation treatment proposed.
- (2) Prior to initiation of fracture stimulation, the operator must evaluate the well. If the operator proposes hydraulic fracturing through production casing or through intermediate casing, the casing must be tested to the maximum anticipated treating pressure. If the casing fails the pressure test it must be repaired or the operator must use a temporary casing string (fracturing string).
 - (a) If the operator proposes hydraulic fracturing though a fracturing string, it must be stung into a liner or run on a packer set not less than 100 feet below the cement top of the production or intermediate casing and must be tested to not less than maximum anticipated treating pressure minus the annulus pressure applied between the fracturing string and the production or immediate casing.
- (3) A casing pressure test will be considered successful if the pressure applied has been held for 30 minutes with no more than ten percent pressure loss.
- (4) A pressure relief valve(s) must be installed on the treating lines between pumps and wellhead to limit the line pressure to the test pressure determined above; the well must be equipped with a remotely controlled shut-in device unless waived by the board administrator should the factual situation warrant.
- (5) The surface casing valve must remain open while hydraulic fracturing operations are in progress; the annular space between the fracturing string and the intermediate or production casing must be monitored and may be pressurized to a pressure not to exceed the pressure rating of the lowest rated component that would be exposed to pressure should the fracturing string fail.

History: 82-11-111, MCA; IMP, 82-11-111, MCA; NEW, 2011 MAR p. 1686, Eff. 8/26/11.

C. <u>36.22.1010</u> WORK-OVER, RECOMPLETION, WELL STIMULATION – NOTICE AND APPROVAL

(1) Within 30 days following completion of the well work, a subsequent report of the actual work performed must be submitted on From No. 2.